

Remarks/Arguments:

Examiner Tupper is thanked for examination of the present Patent Application. Applicant has made changes in the Claims to better point up the invention over the references. The Claims are now believed to be allowable and it is so requested.

1. Reconsideration of the rejection of Claim 12 and 18 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is respectfully requested in view of the amendment to Claims 10 an 18.

2. Reconsideration of the rejection of Claim 10, 11 and 14 under 35 U.S.C. §102(b) as being clearly anticipated by Brown, et. Al., (US Patent 4,491,888) in view of the amendments to the claims and for the reasons hereafter given.

In Fig. 3 of the reference, the elastomeric pad 100 which includes the extension 102 and 104 is located between the baseplate 34 and the casing 12. The casing 12, in turn, is shock mounted (16) to the chassis 18. Both the actuator assembly 26 (head stack) and the spindle hub 78 (disk stack) are mounted directly on the baseplate 34 each without any specified individual cushioning or dampening

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between them and the baseplate (See Figs. 2 and 4 as well as Column 4, lines 29-57 and Column 5, line 54 to Column 6, line 2 respectively). The cross section in Fig. 2 clearly shows the arm 104 of the elastomeric pad 100 between the baseplate and the casing 12 and not between the baseplate 32 and the actuator assembly 26 which is located above the baseplate 32 and enclosed in the upper arms 61 and 58, 62 and lower portion 38, which are integral with the baseplate 32 (See also the dashed outline of the actuator assembly 26 in Fig. 2).

In the present invention (Fig. 1) the dampers 20 and 30 isolate the disk stack 90 and the head stack 50 respectively and separately from the baseplate 10. Claim 10 recites only the damper 30 under the head stack 50 while Claim 11 adds the second damper 20 under the disk stack 90. The head stack 50 and the disk stack 90 are secured to the baseplate by screws 52 and 81 which pass through the respective dampers 30 and 20 threading into holes 16 and 14 in the respective dents 18 and 20a. The dampers thereby provide an effective vertically resilient cushion inhibiting the transfer of vibrations from either component to or from the baseplate and thereby to each other. Applicant respectfully contends that the structure described by the reference does not provide such isolation and therefore does not suggest or anticipate the current invention.

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3. Reconsideration of the rejection of Claims 15 and 16 under 35 U.S.C. §103(a) as being unpatentable over **Brown, et. Al.**, (US Patent 4,491,888) is respectfully requested in view of the amendments to the claims and for the reasons hereafter given.

Claims 15 and 16 are canceled and the rejection is moot.

4. Reconsideration of the rejection of Claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over **Chee, et. Al.**, (US Patent 6,256,173) combined with **Jeong, et. Al.**, (US Patent 5,602,697) is respectfully requested in view of the amendments to the claims and for the reasons hereafter given.

The head stack of **Chee '173** is of the rotating spindle design, ie. the shaft is fixed to the baseplate by means of a central screw. While, as the Examiner points out that **Chee '173** does not address the spindle motor, the present inventors argue that the two damper "above and below" concept of **Chee '173** cannot properly address vertical vibration damping as cited in their invention on either the head stack or the disk drive motor. In both cases, the use of the two dampers permits vertical resiliency of the heads or disks. This is undesirable and is avoided in the present invention by having only a single damper at the bottom, below the bearings.

In the present invention the disk motor is of the rotating shaft type is a our motor as our motor is a rotating shaft design and not fixed with a screw in the hub. while the rotating shaft spindle motor is not in direct contact with the baseplate, it is in fact contacting the elastomeric damper. The material used has minimal compression when constrained at the outer diameter and therefore, does not affect the height relationship of the disks to the head stack arms while still reducing vibrations. The use of a single damper in the head stack restricts vertical movement and reduces vibrations through the head stack. This minimizes and changes the frequencies that are transmitted to the transducer at the end of the head stack arms.

Jeong '697 applies an elastic material between a spindle motor of a disk stack and a baseplate citing a gasket 14 (Column 3, lines 1-which can be made of rubber (column 3, line 14), and is well confined in a circular recess in the baseplate 10 (See Fig. 6). The gasket is clearly "snugly" fitted in the recess which has an inner lip 16 (supporting device) see Column 3, lines 7-9. However, claim 1 of the reference cites that the bottom of the motor (stator which the reference call the "hub") directly contacts the supporting means "strip shaped protrusion" (Column 4, lines 7-10 and 17-18). So the motor is not floating on the gasket but Instead, as Fig. 6 also shows, the hub is in direct contact with the inner lip 16. This teaches against the use of the gasket of **Jeong '697** as a vibration isolator.

While Fig. 3 of the present invention also shows the flange 82 in contact with the baseplate, it is not in any way, suggested, as Jeong does, that the two are in direct contact. It is important, to the present invention that the elastomer provides dampening of vibrations, particularly in the vertical direction. Jeong '697 does not teach the gasket as a vibration damper but instead as a means for maintaining air-tightness (Column 3, line 4).

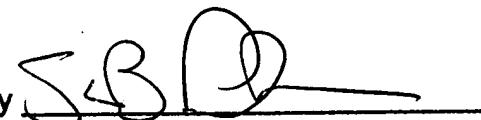
None of the applied or known references address the invention as shown in the amended claims in which a head stack and a spindle disk motor is fitted, each with a single appropriately located and configured, elastomeric damper which suppresses the transfer of vibrations while inhibiting vertical translation of the respective head stack or disk spindle. The invention is believed to be patentable over the prior art cited, as it is respectfully suggested that the combination of these various references cannot combine without reference to the applicant's own invention. Each of the applied references have shortcomings addressed *supra* and in combination these shortcomings remain. Applicant has claimed his invention in detail and does not encounter these shortcomings. The invention illustrated in Figs. 1 and 3 and cited in the claims are believed to be both novel and patentable over these references individually and even more so when used in combination. We therefore request Examiner Tupper to reconsider his rejection in view of these arguments and the amendments to the Claims.

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Examiner Tupper is thanked for examination of the present Patent Application. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

George O. Saile & Associates

By 

Stephen B. Ackerman
Reg. No. 37,761
Tel. (845) 452-5863